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Kirkeby, Carsten Thure; Zervens, Lisa Marie-Louise; Toft, Nils; Farre, Michael; Hisham Beshara Halasa, Tariq

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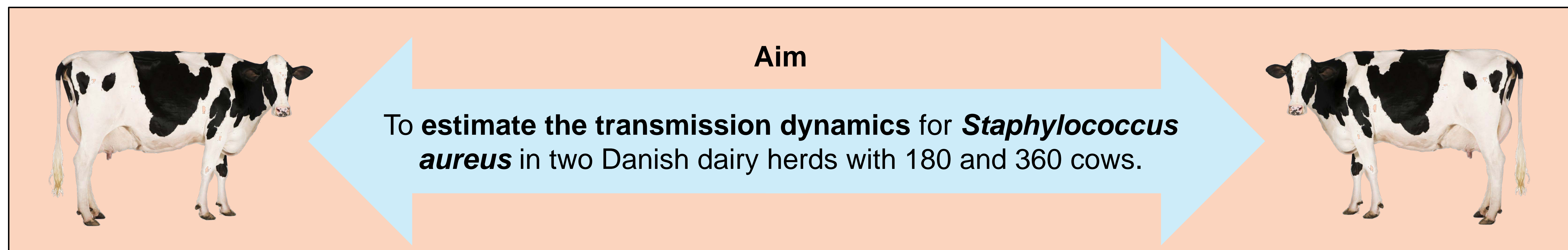
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Analysis of the dynamics of *Staphylococcus aureus* in two Danish dairy cattle herds

Carsten Kirkeby^{1*}, Lisa Zervens¹, Nils Toft¹, Michael Farre², Tariq Halasa^{1,3}

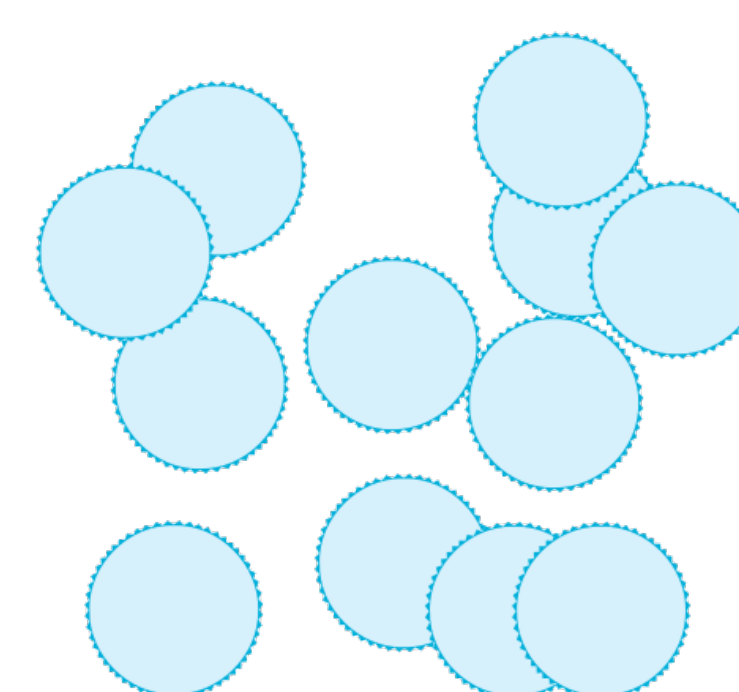
¹ Technical University of Denmark ² SEGES Livestock Innovation ³ University of Copenhagen



Data

- **Sterile quarter milk samples** were collected following pre-milking teat disinfection from all lactating cows each month during 2017.
- Samples were **cultured** and pathogens including *S. aureus* were identified following the NMC protocol.
- Herd 1 had approximately **208** *S. aureus* infected quarters at each sampling.
- Herd 2 had approximately **31** *S. aureus* infected quarters at each sampling.

Results



Transmission rate
0.0070 - 0.0133

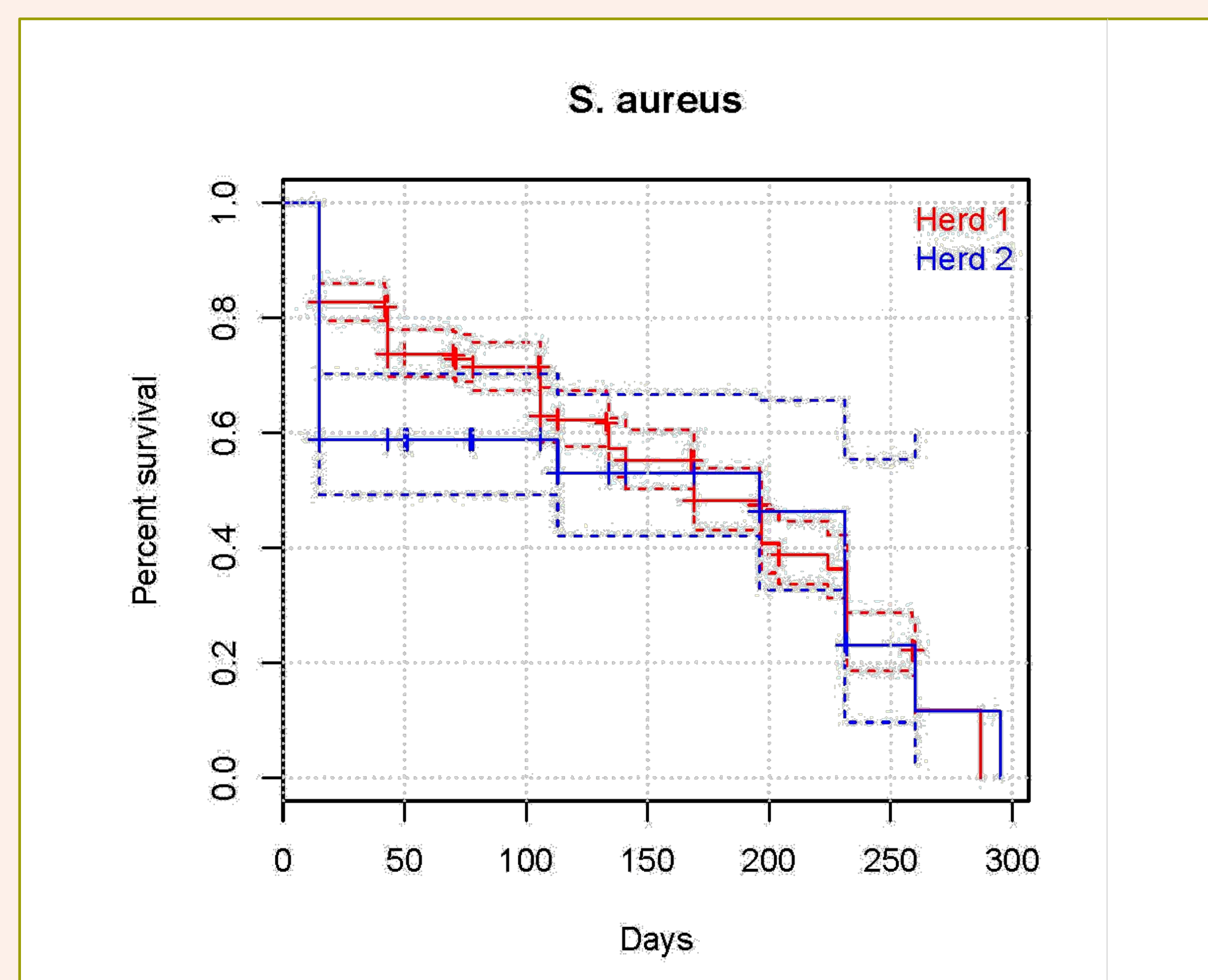
Duration
169 - 196 days

Transmission rates per quarter-day

- **0.0133** (95% C.I. 0.001 - 0.0255) in herd 1 and **0.0070** (0 - 0.0177) in herd 2.

Duration of infection

- **169 days** (95% CI: 169 - 197) in herd 1 and **196 days** (95% CI: 15 - NA) in herd 2.



Conclusions

- **Transmission rate for *S. aureus* was higher in herd 1 than in herd 2.** This was expected because of the high number of new cases each month.
- The differences found in the transmission rate and the duration of infection between the herds in this study indicates that the **transmission dynamics differ between herds**, likely due to differences in management style, hygiene measures, milking equipment and genetic stock.
- Therefore **advice on the prevention and control of IMI should be herd-specific.**

